

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Previously Presented) A method of detecting an angular position of a rotor of an electrical machine which is coupled in rotation without slip to an internal combustion engine that is fitted with a sensor delivering a first signal representative of the angular position of the engine at speeds of rotation that are greater than a minimum measurement speed, wherein

on a basis of at least one characteristic of the electrical machine, a second signal is generated that is representative of an estimated angular rotor position for the electrical machine for speeds of rotation that are less than a maximum estimation speed, said estimation speed being equal to or greater than the minimum measurement speed;

as a function of an estimated speed of rotation, there is delivered to a control circuit configured to control the electrical machine,

the second signal whenever the estimated speed of rotation is below a first threshold greater than or equal to the minimum measurement speed; or

the first signal whenever the estimated speed of rotation is greater than a second threshold greater than or equal to the first threshold but less than or equal to the maximum estimation speed; and

a changeover from the second signal to the first signal, and vice versa, is performed at an estimated speed of rotation lying between the first threshold and the second threshold.

2. (Previously Presented) A method according to claim 1, wherein during an increase in the speed of rotation while the second signal is being delivered, a changeover from the second signal to the first signal is performed when the estimated speed of rotation reaches the second threshold, and wherein, during a decrease in the speed of rotation while the first signal is being delivered, a changeover from the first signal to the second signal is performed when the estimated speed of rotation reaches the first threshold.
3. (Previously Presented) A method according to claim 2, wherein the second threshold is less than the idling speed of the internal combustion engine.
4. (Previously Presented) A method according to claim 1, wherein the estimated speed of rotation is determined on a basis of at least one electrical characteristic of the electrical machine.
5. (Previously Presented) A method according to claim 1, wherein the estimated speed of rotation is determined by a timer triggerable when the engine is started.
6. (Previously Presented) A method according to claim 1, wherein the first threshold is equal to 500 rpm and the second threshold is equal to 700 rpm.
- 7.-12. (Canceled)
13. (Currently Amended) ~~The method of claim 12~~ A method for controlling an alternator, comprising:

determining a position of a rotor of the alternator using data obtained from a first data source;

determining a rotor position for the alternator using data obtained from a second data source; and

switching between determining a rotor position using data obtained from the first data source and using data obtained from the second data source,

wherein a point at which switching occurs is different when a speed of rotation is increasing than when the speed of rotation is decreasing.

14. (Previously Presented) The method of claim 13, wherein a point at which a switch is made is less than an idling speed of an engine to which the alternator is coupled.

15.-17. (Canceled)

18. (Previously Presented) A method of detecting an angular position of a rotor of an electrical machine, comprising:

determining a rotor position for the electrical machine using data obtained from a first data source;

determining a rotor position for the electrical machine using data obtained from a second data source;

switching between determining a rotor position using data obtained from the first data source and using data obtained from the second data source, a point at which switching occurs being different when a speed of rotation is increasing than when the speed of rotation is decreasing.

19. (Previously Presented) The method of claim 18, wherein switching occurs when a speed of rotation is decreasing only when the speed of rotation is zero.

20. (Previously Presented) The method of claim 18, wherein the switching occurs based on an estimate of the speed of rotation.

21.-24 (Canceled)

25. (Currently Amended) ~~The vehicle of claim 21~~ A vehicle comprising:

an engine;

an electrical machine coupled to the engine and comprising a rotor; and

a control circuit configured to determine a position of a rotor of the electrical machine using data obtained from a first data source and determine a rotor position for the electrical machine using data obtained from a second data source,

wherein the control-circuit is configured to switch between determining a rotor position using data obtained from the first data source and using data obtained from the second data source, a point at which switching occurs being different when a speed of rotation is increasing than when the speed of rotation is decreasing.

26. (Canceled)

27. (Currently Amended) ~~The vehicle of claim 21~~ A vehicle comprising:

an engine;

an electrical machine coupled to the engine and comprising a rotor; and

a control circuit configured to determine a position of a rotor of the electrical machine using data obtained from a first data source and determine a rotor position for the electrical machine using data obtained from a second data source,

wherein the control circuit is configured to switch between determining a position of the rotor using data obtained from the first data source and using data obtained from the second data source, the control circuit configured to switch to using data obtained from the second data source when a predetermined amount of time has elapsed after the engine is started.

28. (Previously Presented) The vehicle of claim 27, wherein the control circuit is configured to switch to using data from the first data source when the engine is stopped.